

CARLETON UNIVERSITY

Magazine

VOL 1 NO. 1 WINTER 1988

Carleton's
World Of
Science

Music
Celebrates
20th

Alumni
Weekend
photos



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Magazine

VOL 1 NO 1 WINTER 1988



FEATURE REPORT 14

The flowers on the cover of this magazine were photographed in the University's Environmental Laboratories, a series of greenhouses located across from the Administration Building. Carleton's Faculty of Science has gained world-wide recognition for its research achievements in a variety of areas, including plant physiology. Yet within the University, few really know what goes on in the Tory, Steacie and Herzberg Buildings. In our feature report, we try to shed some light on the varied and fascinating world of science at Carleton.

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Through the Years: Kathy Ruggiero
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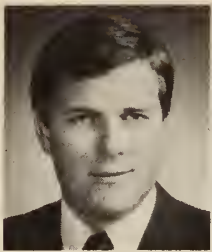
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PARENTS: If you're receiving mail for your son or daughter, we'd appreciate your letting us know their current whereabouts. Call or write: Development and Alumni Services, Carleton University, Ottawa, Ontario, K1S 5B6. Telephone (613) 564-2800. We'd be happy to keep sending the magazine to you too. If you like to receive it let us know when you get in touch with us and you'll continue to receive *Carleton University Magazine* free of charge.



EDITOR'S
COLUMN

A Magazine For All

Regular readers will be a bit surprised to be receiving *Carleton University Magazine* this month, instead of the familiar *Alumni News*. I hope you will find it a pleasant surprise.

Countless articles have crossed my desk warning of the dangers and pitfalls that lie in wait for the unsuspecting editor or designer who sets out to redesign a publication. So it was with some trepidation that I ventured down that path.

Yet, there was a compelling reason to make a change.

Since the *Alumni News* was first introduced as a magazine in January 1985, it has consistently drawn a positive response from readers. Emboldened by this, we have steadily been increasing the magazine's circulation. It goes to all faculty and staff on campus, to the University's Board of Governors, to local libraries, and to City of Ottawa information centres.

Now, in the midst of Carleton's biggest fundraising campaign ever, a whole new audience is developing: our community supporters. One way of ensuring they appreciate the value of their support is by keeping them informed of the achievements of the University and its alumni.

In fact, the need for communicating the University's programs and research achievements has never been greater. Carleton, in common with all universities in Canada, needs and values public support. We hope this magazine will play a significant role in meeting that need.

Our goal is to provide our readers with an understanding of the contributions that the University is making to the advancement of knowledge in today's world. We'll strive to present the latest advances in teaching, research, and community service at Carleton, be it in the arts, sciences, social sciences or engineering.

To help achieve this goal, the Carleton University Press has agreed to assume the role of publisher for the magazine. Already a success story in the precipitous world of academic publishing, the Press brings a reputation for quality and excellence, while benefitting from the added exposure it receives from the magazine's circulation.

In essence, *Carleton University Magazine* remains a magazine for and about the University's alumni. But the news is shared with a broader audience, and so we've changed our name to reflect this development.

I hope you'll continue to look forward to receiving and reading *your* magazine.

CARLETON UNIVERSITY CAMPUS CALENDAR

Members of the public are invited to attend a wide range of public events held at Carleton. Alumni are especially welcome. Here is a sampling of upcoming events for the winter and spring.

Exhibitions

Emanuel Swedenborg, scientist, inventor, theologian, philosopher. January 5-26, 1988, main floor, MacOdrum Library.

Black History. February 2-26, Main floor, MacOdrum Library.

20th Anniversary of the Music Department at Carleton. March 2-25, Main floor, MacOdrum Library.

Sock'n'Buskin Theatre

Romeo and Juliet. March 9-12, March 16-20, 8 p.m., Alumni Theatre. (Matinees will also be held, times to be announced.)

Music Department Anniversary Events

International Conference on Alternative Musicology, March 11-13, Room A900, Loeb Building. Call 564-3633 to register.

Piano recital by Elaine Keillor, March 26, 1988, 8 p.m., Alumni Theatre.

Marston LaFrance Research Fellowship Lecture

"Inessa Armand as Revolutionary and Feminist," by Carter Elwood, Professor of History, Carleton University, on Thursday, March 13, 1988, 8 p.m., Senate Room.

Davidson Lecture

Religion and art, by Olag Grabar, Aga Khan Professor of Islamic Architecture, Harvard University and Curator, Fogg Museum, Wednesday, March 9, 1988, 7:30 p.m., The Pit, Architecture Building. Sponsored by the Department of Religion.

Philip E. Uren Memorial Lecture

"Soviet Newspaper Reporting on Canada, 1945-1987: Themes and Implications," by J. Larry Black, Director, Institute of Soviet and East European Studies, Carleton University, Thursday, March 17, 1988, 8 p.m., Senate Room.

Gerhard Herzberg Lecture

By John Polyani, Professor of Chemistry, University of Toronto, on Friday, March 25, 1988, 8 p.m., Alumni Theatre. Topic to be announced.

Alan B. Plaunt Memorial Lecture

By Mel Hurtig, Hurtig Publishers, on Friday, April 8, 1988, time and location to be announced.

To avoid disappointment in the event of a change or cancellation, please call (613) 564-7177 beforehand to confirm that the event will be held as announced.

Fund Passes Half-Way Mark

It's been an incredible fall at Carleton this year.

After months of planning, research, and working out minute details, the Challenge Fund became a reality. And it's made a big impact.

By the beginning of December, half of the \$15 million goal had been reached, even though some phases, including the alumni canvass, had yet to get underway.

"We've been really thrilled by the response," says Campaign Chair, John Redfern.

"The University has consistently been able to present its case to prospective donors, and received their enthusiastic and warm support.

"At the same time that the University has been receiving the funds it needs for some much needed expansion of facilities, the community has gained an increased understanding of what the University is about, and the tremendous strides it's made in research and education.

"It seems to me that everyone is coming out a winner so far."

The Challenge Fund got off to a rousing start in October when close to 700 people packed the Ottawa Congress Centre to meet and hear world-famous actor, entertainer and playwright, Peter Ustinov.

He delighted the capacity crowd for close to one hour with anecdotes and reflections on academia, politics, and life.

"I have never been able to get into a university myself," he said, "so I became Rector of the University of Dundee in 1969. I thought the only way for me to get in was from the top."

He spoke of the importance of support for universities, and said that money is needed desperately in order for institutions to continue to grow and meet society's demands.

His visit coincided with the announcement of the largest corporate gift received by the Challenge Fund so far.

Minto Construction donated \$1 million to the Fund to be used towards the new engineering building.

The building will be called the Minto Centre for Advanced Studies in Engineering.

Mr. Irving Greenberg, President of Minto Construction Limited and a member of Carleton's Board of Governors, said he believes the University is making an important contribution to education and deserves the community's full support.

More good news arrived in the early fall, when the Students' Association confirmed the validity of a referendum held earlier to add a levy to student fees to support the Challenge Fund. It is expected that the levy, which amounts to \$15/year for the next five years for a full-time student, will raise about \$1.2 million for the Fund.

The University's Board of Governors also



Peter Ustinov delighted a capacity crowd at Ottawa's Congress Centre on September 18 to launch the community phase of the Challenge Fund.

came out solidly in support of the campaign, surpassing the \$100,000 goal that had been set for them.

The final show of support from the University community came from faculty and staff, who pledged almost \$620,000 to the Fund. The total was 20 percent more than the \$500,000 goal that had been sought.

Tom Ryan, Vice-President (Academic) said he was delighted by the response.

"It represents an unparalleled success," he noted. "Almost three times more money has been raised in this University community campaign than in any previous endeavour."

The Campaign has also made great strides externally as well.

Eight philanthropic foundations have pledged more than \$650,000 to the University, including: \$250,000 from the J.W. McConnell Family Foundation; \$25,000 from the J.P. Bickell Foundation; \$100,000 from the Harold Crabtree Foundation; \$20,000 from the Jackman Foundation; \$25,000 from the McLean Foundation; \$100,000 from the Molson Family Foundation; \$10,000 from the Senator Norman M. Paterson Foundation; and \$25,000 from the RHW Foundation.

"Obtaining support from foundations represents a considerable challenge because most do not normally give to bricks-and-mortar needs," says Sam Hughes, chair of the Foundations Committee.

"We're very pleased with the results so far."

Though the main alumni phase of the campaign has yet to get underway, alumni have already contributed more than \$310,000 to the fund. The personal canvass in Toronto raised \$170,000, while other alumni contributions have come in through other phases. As well, Wes Nichol, BA/54, has contributed

an additional \$150,000 to the fund. (See page four of this issue for more details about the alumni phase.)

The Challenge Fund will fund the most significant building program at the University in almost 20 years. The total cost of the program is \$30 million. The goal of the campaign is to raise \$15 million over the next five years from private sources.

"The provincial government has made it clear that it cannot fund capital projects on its own, that it must see support from other sectors before it will participate in capital projects," says Mr. Redfern.

"We expect that the provincial government will match the \$15 million raised by the Challenge Fund."

The Challenge Fund building program includes: a \$13 million, fully-equipped engineering building; a \$10.5 million extension to the MacOdrum Library, doubling its size; a \$4.5 million expansion of the Schools of Business and Public Administration, and new quarters for the Department of Mathematics and Statistics; and a \$2.2 million renovation to the St. Patrick's Building to provide a proper location for Carleton's fine arts departments, which are currently spread across the campus.





Winnipeg alumni met this Fall in one of many branches being established across the country in conjunction with the Challenge Fund.

Ottawa Alumni Organize

Starting January 27, 1988, 75-100 hand-picked alumni Challenge Fund canvassers will be pounding the Ottawa pavements and burning up the local phone lines in an effort to take a giant step toward the University's \$30 million Challenge Fund goal.

The eight-week effort, anchored by a \$150,000 gift from alumnus and Ottawa lawyer, Wes Nicol, Chairman of the Board of Tartan Group Inc., is the first concerted effort to canvass Ottawa alumni on a personal basis.

The organizers of the campaign hope to raise a significant amount toward the \$1.5 million alumni goal.

The official launch of the alumni campaign will be held on January 27 in the Residence Commons. Christopher Henderson, an honours economics grad, Class of '79, and now the Associate Executive Director of the Royal Ottawa Hospital, is chairing the Ottawa Alumni Challenge Fund campaign.

After the starting gun for the campaign has been sounded, the canvassers will approach approximately 500 pre-selected potential donors to ask for support. Organizers are targeting people who have had an impact on the Ottawa community and have demonstrated a keen interest in Carleton.

"I've been amazed at just how influential Carleton alumni are in Ottawa," says Mr. Henderson.

"They dominate many sectors of the business and professional life of the city. It really reflects the quality of the education they received at Carleton."

He's delighted by the enthusiastic response he's receiving from potential canvassers.

"People are not saying no to us," he says. "If this is any indication of how the campaign will go, we won't have any trouble in meeting our goal."

The 500 people initially targeted for canvassing will not be the only alumni contacted during the campaign.

Organizers hope to reach all 18,000 Ottawa-area alumni through a phone-mail campaign during 1988.

"We're not leaving anyone out," says Mary Huband, Development Officer in

charge of organizing the campaign.

She hopes anyone who may have been overlooked inadvertently, either as a donor or a canvasser, will come forward.

"We're anxious to hear from people eager to help," she comments.

Potential donors or volunteers are encouraged to call Mr. Henderson at 722-6521, or Cathy Burke, Assistant Development Officer, at 564-2800.

Cross-Country Check

Volunteer alumni canvassers in other parts of the country are already hard at work.

In Toronto, some \$170,000 has been raised for Carleton, in the personal canvassing phase of Toronto alumni under the leadership of David Vice, MEng/65.

In Winnipeg and Edmonton, canvassing has recently begun. In both cities, new branches of the Alumni Association have been formed and a successful social event has been held.

Winter parties are scheduled in Victoria, Vancouver, Calgary and Montreal to launch both Challenge Fund and branch activities in those cities.

In the Atlantic provinces, volunteer organizers from St. John, Charlottetown, Fredericton, Halifax, Moncton and St. John's have met with University officials. Plans are underway to approach some 100 Carleton alumni in Atlantic Canada, where it is hoped that two branches - one in Newfoundland and one for the three Maritime provinces - will be formed.

Still to be organized: campaigns in Saskatchewan and Southwestern Ontario.

CARLETON UNIVERSITY CHARITY BALL

MAKE A WISH
WITH/AVEC



FABULOUS
CLICHEZ



Friday, January 22, 1988
Vendredi, le 22 janvier 1988
Palais des Congrès
Place du Portage, Hull
Doors open at 8:00 p.m. (ID required)
Ouverture 20:00 h (Age de majorité)

Tickets \$10.00
Available Unicentre Store
4th Level Unicentre Building Carleton
or by calling 564-3783

\$10.00 le Billet
Disponible au Campus Ministry
Edifice de l'Unicentre
85 rue Haste
Université d'Ottawa

Proceeds to Benefit



The Children's Wish Foundation of Canada

Alumni Needed for Enrichment Program

Carleton's School of Continuing Education invites alumni to serve as campus guides for high school students attending the Enrichment Mini-course orientation evening.

Tuesday, May 3, 1988
7-9 p.m.

The enrichment mini-course program was initiated in 1981 by the Carleton Board of Education to offer bright high school students in grades 8-12 an innovative and challenging learning experience on a university campus. Since that time, Carleton and University of Ottawa faculty have designed and taught mini-courses to students originating from 13 Boards of Education.

Many mini-course students have never before visited the campus and are apprehensive about the week of classes. To help overcome any anxiety, an orientation is held for students and their families. The session is intended to help students meet their instructors and peers, find their way around and feel a warm sense of welcome.

Here's where alumni can help. As a campus guide, you will show the students the general layout of the campus and, more specifically, their classroom in relation to the library, the cafeterias and athletics facilities. You'll probably be asked a lot of questions too, but we'll give you some training beforehand so you'll be well prepared. At the end of the orientation session, you'll be invited to attend a reception for the students and their parents.

The evening is
a lot of fun.
It's a big event
for the students
and their families.
We think you'll
enjoy it too.

Please return to: Beverlae Buckland, School of Continuing Education, Carleton University, Ottawa, Ontario, K1S 5B6. Or call (613) 564-6660.

☐ I am interested in acting as a guide for the Enrichment Mini-Course Orientation Evening.

Name _____

Apt/street _____

city _____

province _____

postal code _____

home phone _____



David Suzuki, popular host of CBC Television's "The Nature of Things" and a professor of zoology at the University of British Columbia, was awarded an honorary Doctor of Science degree at Carleton's Fall Convocation ceremony on November 22, 1987. More than 700 students graduated from the University this Fall.

New Exchange

Carleton University recently signed a new academic exchange agreement with Humboldt University in East Berlin.

It's the first of its kind between Canada and East Germany, according to Fraser Taylor, Director of Carleton's Paterson Centre for International Programs.

The agreement has a number of components involving staff, students and collaborative research.

Over a six-year period, it provides two month-long research and teaching exchanges, as well as a longer visit of one semester.

Professor John Shepherd of Carleton's Department of Music says he hopes the agreement will help Carleton students gain a deeper understanding of how popular and rock music are handled in East Germany.

"They have an indigenous rock music of their own which is quite distinct from rock music in the West," he comments.

Knowledge Works

Carleton University and KnowledgeWorks Research Systems Limited, a young Canadian company specializing in artificial intelligence, have signed an agreement to jointly develop a software system.

Called TEASE (Tree Exploration and Structuring Expertise), the system has the capacity to take a large amount of information, quickly sort through it and extract common relationships that may exist between variables in the information data base.

Franz Oppacher, Associate Professor of Computer Science, will act as scientific adviser in the development and imple-

mentation of the TEASE software system. The project, financed by Knowledge Works, is expected to take a year to complete.

The system, at an early stage of development, was used to do data analysis and build an expert system for Employment and Immigration Canada. It was used to analyze employment monitoring information to match the characteristics of job seekers with labour market demands.

The results were placed in a desk-top publishing system that will enable employment counsellor to assess potential jobs, clients and training requirements more effectively.

Barry de Ville, President of KnowledgeWorks and formerly of Carleton's Computing and Communications Services, says that "the support that Carleton is giving to KnowledgeWorks is a great model of cooperation between a new company and a university."

John ApSimon, Associate Dean of Graduate Studies and Research, adds that interaction with companies like KnowledgeWorks is an example of Carleton's commitment to the economic development of the region.

Under the terms and conditions of the agreement, Carleton will receive royalties as well as a free-of-charge site licence to use TEASE for research purposes.

Congratulations CKCU

Carleton's student radio station, CKCU-FM, raised \$91,799 from some 3,500 area listeners in its 10th annual fundraising drive this fall. The record amount surpassed the station's goal of \$89,000. The station also won the third annual Industry Award as North America's Campus Station of the Year.

Panda Aftermath

University officials are taking a long and hard look at the future of the traditional Carleton-University of Ottawa Panda Game, after this year's accident and rowdiness sent a number of Carleton students to hospital.

Fourteen people were injured, three seriously, when a handrail at Lansdowne Park's grandstand snapped under pressure, sending fans tumbling to the ground below.

Investigations were held to determine the cause of the accident, ranging from student misconduct to the possibility of structural flaws in the stadium's handrail. The incident resulted in a flurry of media attention across the country, while various community groups and local politicians publicly condemned the annual football game.

Vice-President (Academic) Tom Ryan says the University regrets the unfortunate accident and shares concern with the community about the injured students and the behaviour of the panda fans.

"We are very concerned about the excessive use of alcohol and the misbehaviour of students," he commented. "It's a very complex, serious situation."

Students' Association President, Bruce Haydon, agrees the situation is extremely serious, but thinks that cancelling the game is not the answer.

"We can't ignore the alcohol abuse and disorderly conduct," he says. "We must look for new ways of dealing with these problems, but eliminating the game is not the answer."

"A task force, with community, police, and University representatives has been established at CUSA's request, to submit a list of recommended changes to the Panda Game, along with a decision on whether to support holding the game at Lansdowne Park.

The report of the task force is scheduled to be presented at a meeting of the City's Community Services and Operations Committee on March 9. The University has stated that a change in venue for the game for 1988 would be desirable, but it will co-operate and work with the task force on providing recommendations for the game.

Aid for Disabled

Carleton is the first university in Canada to have round-the-clock care for disabled students in residence.

A Ministry of Community and Social Services grant worth close to \$65,000 has been awarded to the Office of the Coordinator for the Disabled to provide funds to give disabled residence students more than just day-time attendant care.

Two agencies, Paramed during the day, and CareOption in the evenings, will have representatives living in residence and on call.

"Some of the students are quite independent, but others need more than just morning and evening care," said Mary Harris, who is the coordinator of the new service.

"Now we'll be able to give disabled students

more choice, flexibility of lifestyle, and independence."

Before the service, disabled students had been limited to staying up until 11 p.m. Then, the infirmary would close and medical staff went home, leaving disabled students to depend on their peers for assistance.

"We expect the number of severely disabled students living in residence will increase with this new service," says Larry McCloskey, Carleton's Coordinator for the Disabled.

"We are hoping that next year's grant will be close to \$100,000."

Currently, there are adequate facilities for 11 disabled students in residence.

Carleton is one of the most accessible universities in Canada for the disabled, with its underground tunnel system to link the campus buildings; ramps and special wash-room facilities in all buildings; and other special features such as phonic ear systems for the hearing impaired, and tape transcription services for blind students.

Recently, a Disabled Students' Resource Centre, the first of its kind in Canada, opened to provide a place where both disabled and able-bodied students can drop in for information on specialized services. The Centre also features a volunteer-student matching service for those who need help with note taking.

Sports Report

The annual Alumni Sports Night, held in the Ravens' Nest on October 23, 1987, featured triple-header competition between grads and current teams, and set this year's flock of Robins and Ravens off to an encouraging start.

The **Volleyball Robins** opened the evening by beating a team of eight alumni 3-0 in three close sets. Alumni players were: Yinka Aiyede, BA/83; Betty Ann Balfour, BA/72; Maren Hansen, BAHons/86; Zelma Kiss; Kim Love, BA/84; Cheryl Sevigny, BAHons/87; Dominique Short, BCom/83,

MMS/87; and Margo Stanton, BAHons/85.

The volleyball alumni game has been a Carleton tradition since 1972, when it was established by then coach and former player, Gail Blake, BA/70. Gail is now Assistant Director (Women's Athletics) at Carleton.

A Robins Volleyball Booster Club has been launched this year. In return for a modest financial contribution, members receive a season's pass and the *Robins Volleyball Newsletter*. Interested? Call Gail Blake or coach Claude Lapré at (613) 564-2646.

The **Basketball Robins** took on a squad of former players, with youth squeaking by experience 56-54.

Says new coach, Larry Lanthier, "It was a very hard-fought game. The Robins tried to 'run' the alumni team but they found out, to their surprise, that they couldn't outpace their more experienced counterparts."

John Love, BAHons/78, former Ravens basketball star, coached the alumni team. Leading the scoring with 16 points was Joan McKenna, BA/85. Joan recently returned to Ottawa from the Police College, where she was training for the Gloucester Police Force. Other leading scorers were Lynn Plunkett, BCom/86, who is now working for Bristol Meyers, Karen Spalding, BJ/86, who is studying nursing at the University of Ottawa, and Cheryl Pangborn, BA/79.

The final game of the trio provided the **Basketball Ravens** team with its first win over the alumni in five years, with a 107-62 victory.

Rick Powers, BA/81, led the alumni with 17 points, while all-time Raven top scorer, Bill Holmes, BA/82, chipped in 11.

The highlight of the game was a special half-time shootout featuring a group of alumni from the '60s pitted against one from the '70s. The '60s team, led by Dick Brown, BA/67, Patty Stewart, BA/67, John Callahan, BScHons/64, MA/65, and Dennis Schuthe, shot the lights out in this event. Despite their effort, however, the '70s team prevailed, as former Ravens Jon Love, BAHons/78, Gary Breen, BCom/78, Tom

Tennian, BSc/76, Jim McSheffrey, BSc Hons/79, and Dave Loney, BA/79, led their team to victory. A rematch has been demanded at next year's event.

Before the game, the Ravens Basketball Alumni Association held its first meeting. Drew Love, BA/78, MA/84, was elected president; Gary Breen, BCom/78, is secretary/treasurer; and Rick Powers, BA/81, Greg Yeldon, BCom/82, John Elliot, BA/62, and former Ravens coach Greg Poole (1973-'76), were named as councillors. In all, 30 former Raven hoopsters attended the pre-game reception and first annual meeting.

Women's Soccer Success Story

In its first year as a varsity team, Carleton soccer Robins had a highly successful year.

They gained a playoff spot with their third-place finish in regular season play in the Ontario East division, and finished fourth of the six playoff teams in the all-Ontario final.

Built around seven players who returned from last year's soccer club and seven newcomers, the Robins were shut out only once, while they shut out their opponents four times.

The team finished second in goals scored, with 26, and registered an undefeated record at home, with two wins and a tie.

Kara Blanchette scored Carleton's first hat trick, against Trent, and goalie Kelly Brant recorded five wins, while posting the third best goals-against average in the OWIAA East. Janet Podleski made all-Canadian second team all-stars.

Coach David Kent enjoyed his finest season ever as a head coach. This was the third time in his eight-year coaching career that he has introduced women's soccer at the university level.

Thanks from CUSA

Even though Orientation Week 1987 for new students was over a long time ago, the positive effects of that week are still being felt today. A large part of the success of our Orientation Week came from the many businesses in the Ottawa area that contributed either time or prizes to the students' association. The organizers would like to thank the following sponsors for their support in August and September: Molsons, Carling O'Keefe, Coke, Travel Cuts, Malibu Jacks California Epic, Mayfair Cinema, Japan Camera Centre (Rideau Centre), Robe di Kappa, Records on Wheels, Dominos Pizza, 7th Heaven Futons, Labatts, Pepsi, Sarah Clothes, Wringers Laundry and Bar, Olivers, O'Toole Roadhouse, Hurleys Roadhouse, Windsurfing Ottawa, Andre Lalonde Sports, Fat Alberts, Air Canada, Raquetpower Sports, Towne Cinema, The Raceway Tavern, Camp Fortune, Duke of Somerset, Ziggy's Hair Salon, Mother's Restaurant (Ottawa), Capital Foods, The Hayloft, and Roosters Pub.



Lumonics President Hugh MacDiarmid (l) visited the campus this Fall to see how a new laser manufactured by his company is being used in high energy physics research. Here, physicist John Armitage discusses some of the laser's finer points with him.

The Art of a Dictionary

by Leslie Roche

Donald Smith's excitement over his latest project is contagious.

"It's one of the most important international publications to come out of Canada," he says enthusiastically.

A Professor of French at Carleton, he's proud to have been one of two copy editors of the *Visual French-English Dictionary*. Along with co-editor Diane Martin, he worked on the project with editor-in-chief, Jean-Claude Corbeil, "one of Quebec's most distinguished linguists."

A visual dictionary is exactly what the name implies: a major part is played by illustrations, and the user can find a word by merely examining a picture. It may be a bicycle tire, a tiny mechanism in a watch, or a fondue pot.

Although the concept of a visual dictionary is not new, it has seldom been used in the past. The original one was produced in Germany, and there is one in use currently in the United States and Canada "that is not serious and is out of date," says Professor Smith.

"This is a dictionary of the objects of the modern world," he explains.

"We live in a visual world, and the best way to get people to use a dictionary is to go visual."

The book is intended for the adult public and people interested in language acquisition.

Each definition/illustration is drawn from scratch, and there are no translations, the editors having insisted on original sources for each word and object.

The introduction for the dictionary sets out the two purposes for the book: one is to list all the terms that reflect the different areas of everyday modern life; the other is to make them visual through the use of illustrations.

By its very nature, this concept eliminates the listing of abstract words such as adverbs, verbs and adjectives.

A dictionary for everyday living, rather than for the specialist, the Visual Dictionary treats familiar subjects with more detail than it does obscure ones. It contains no written definitions, and it names rather than describes the illustrations.

All of this it does in four forms: British and North American English, and European and North American French. Two types styles and colours simplify the process.

Professor Smith first became involved with the project through his previous association with Editions Québec/Amérique Inc. This publishing house had produced three of his books of literary criticism. Since he was also the co-author of a bilingual dictionary of Québec and Acadian French, he was asked to be a copy editor for this project.

It was a success even before it was published.

Four years ago, the President of Québec/Amérique took a sample of the dictionary to

the Frankfurt International Book Fair. There, the idea was greeted with great enthusiasm. The Americans, Chinese, Spanish and Yugoslavians were all interested in the idea, and there will be meetings in the near future with Germany and Japan.

The French-English version was first published under licence by Harrap's, the famous London and Paris publishing house. This edition is now available in more than 45 countries.

"Harrap's expects this to be one of its best sellers," says Professor Smith. "The *New York Times* chose it as one of the 12 books on its Christmas list. Very unusual for a dictionary."

Agreements have been made to publish the dictionary in 23 different languages, always English and one other, with a Chinese version currently in preparation.

The dictionary changes slightly from country to country, says Professor Smith. "In the British version, they asked us to take out snowmobile, which they don't have much of, and asked us to include polo."

Through all of the international dealings, and there have been many, the visual dictionary remains a distinctly Québécois product. Editions Québec/Amérique retains the copyright, and all the printing, even for the Harrap's edition, was done in Québec.

"We control everything," says Professor Smith. "It is a true Québécois product."

The visual dictionary has not been the only

project to capture Professor Smith's attention of late.

A writer in his own right, he has recently written three books about French Canadian writers, and also founded and edited a series called "Littérature d'Amérique: Traduction".

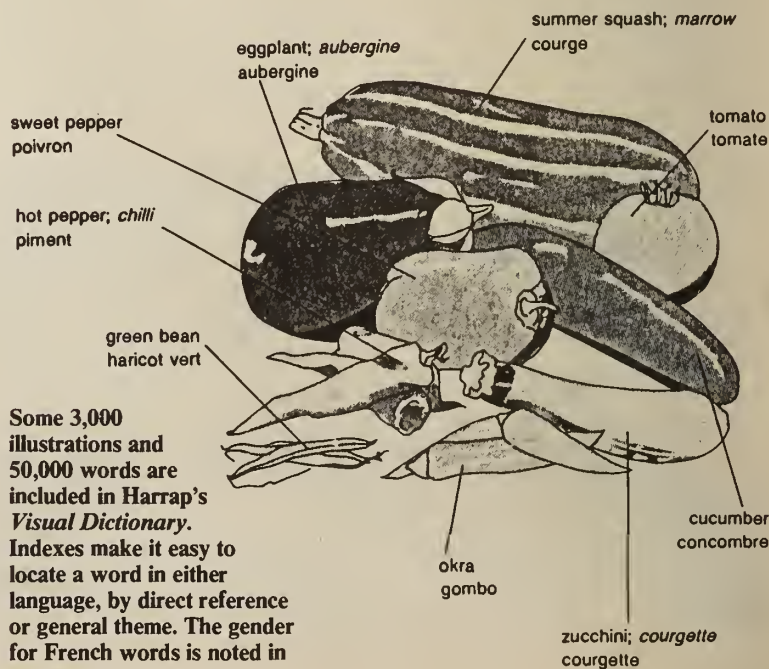
His challenge is to find both new works and classics from English Canada, the United States and South America and have them translated into French.

Having started with Canadian works, he was amazed to find which translations had previously been neglected. His first two projects were L.M. Montgomery's *Anne of Green Gables*, and Stephen Leacock's *Sunshine Sketches of a Little Town*.

The famous *Anne* had already been translated into 45 languages, none of which was French. The remaining Montgomery books are on his future list, as are the works of Robertson Davies, to name a few. Discouraged by the reverse situation, that many major Québécois writers have not yet been translated into English, he's also founded Montreal Press, a division of Québec/Amérique. The first translated novel will be *Masks* by Gilbert La Rocque.

Professor Smith says he enjoys the feedback that his writing and translation projects provide for his work at Carleton.

He finds his knowledge is continually enhanced as he learns more about the literary world, and is excited about the vitality of the French-Canadian publishing industry.



Some 3,000 illustrations and 50,000 words are included in Harrap's *Visual Dictionary*. Indexes make it easy to locate a word in either language, by direct reference or general theme. The gender for French words is noted in the index.



Music Department Celebrates 20th

The Department of Music has produced a dazzling celebration to mark its 20th anniversary year.

Celebrations got underway on November 20 with an organ recital by Professor David Piper and will continue till the Spring of '88.

The activities are designed to focus on the breadth of the Department's unique program.

It boasts a leading program in electronic music studies, and has been innovative in offering courses frequently lacking in larger music departments, including the study of folk, tribal and popular music.

"We're rooted in the liberal arts. We like students to get an education as well as musical training," says Department chair, Bryan Gillingham.

"From the start, we've focused on two principal themes. The first is the history of music and its relationship to man and society; the second is composition."

According to Professor Gillingham, Carleton's music department was the first in Canada to introduce courses in Canadian music to its curriculum.

The department's founding director, John Churchill returned from England to participate in the anniversary celebrations in December, including the conducting of the annual Christmas "Come Sing Messiah."

In March, the second cluster of events will reflect both a strong interest in Canadian music and the wide variety of music available.

Events include a conference on "Alternative Musicology" March 11-13, organized by Professor Shepherd with a grant from the Social Sciences and Humanities Research Council.

The conference will assess the impact of new areas such as popular music studies or musicology as a whole. Speakers from five countries, including Cuba and the German Democratic Republic will be participating.

An exhibition in the MacOdrum Library, highlighting composer and former professor, Robert Fleming, will also be held in March.

Celebrations will conclude with a piano recital on March 26 by Professor Keillor.

The variety of anniversary activities reflects the creative and intellectual energy of the six-person department.

Started as a one-man department by John Churchill, the department expanded its

program as new people came on board. A concentration in electronic music started in 1972 when David Piper arrived; early music and renaissance music was added in 1976 with the arrival of Bryan Gillingham; and popular music courses, including jazz, blues, and even country and western, were added in 1986 with John Shepherd.

Though small in size, the department is incredibly active. Professor Elaine Keillor is well known as a performer and recording artist; David Piper and Patrick Cardy are performers who've received commissions for their work; Alan Gillmor has just published a book on Eric Sutee; while others are involved with periodicals and music organizations both in Canada and abroad.

Founded in 1967, the Department of Music granted its first degree in 1971. More than 40 honours music students are enrolled today, along with 800 student course enrolments.

The department does not grant a master's degree in music, but graduate courses are available through the Institute of Canadian Studies.

Undergraduates are given the chance to develop in a variety of areas at the BA level, including composition, electronic and computer music, and Canadian, early or popular music.

All honours students even take a course in drumming "to get a feel for music from the inside-out," says Professor Shepherd.

Graduates from the program can be found in diverse occupational areas, ranging from education and real estate, to high-tech industries and journalism. Some are performers and film music composers.

Dr. Gillingham has a vision for the department in the next 20 years. He would like to see it grow in facilities and faculty members, and to have a graduate level program.



Carleton University
Ottawa, Ontario

President and Vice-Chancellor

Carleton University invites applications and nominations for the position of President and Vice-Chancellor. The appointment date is July 1, 1989.

Applications and nominations should be sent by February 29, 1988 to:

Presidential Search Committee
Room 607, Administration Building
Carleton University
Ottawa, Ontario
K1S 5B6

Biologist Probes Pollution



Cam Wyndham: Reaching for solutions to the problem of pollution.

by Leslie Roche

Cam Wyndham began his career in microbiology with a fishing trip 10 years ago.

"I started all this by going fishing on the Niagara River," he says. "I didn't catch anything bigger than six inches, but the fish were full of mirex and PCBs."

Dr. Wyndham is now one of the few Canadian scientists who studies the use and development of micro-organisms to combat water pollution. He is new to Carleton this year, and is teaching courses in biotechnology and microbiology.

The basis of his work is the microbiological study of naturally occurring micro-organisms or bacteria. But his real interest is in microbial evolution.

"Even microbes evolve," he says. "What we have done in polluting the environment is to give them the challenge to do so."

His main concern is in organic chemicals and the fact that they can be metabolized by an organism and made useful to it.

"When we say biodegradable, it means that the micro-organisms are metabolizing the chemical, which is to our advantage," he explains.

Since most of our organic chemicals have been synthesized over the last 100 years, they are new to the environment. However, micro-organisms have naturally evolved to deal with some of them.

"The real problem for us occurs when this evolution does not happen naturally," says Professor Wyndham.

At that point, genetic engineering becomes necessary to deal with these non-biodegradable substances.

However, developing new micro-organisms or genetically engineering them is one thing; determining how they will function and survive in the environment is another.

In Dr. Wyndham's lab, they are checking the rate of survival and watching how the genes change to combat pollutants. To accomplish this, they are using the same gene probe technology that is used in medicine.

As well as actually creating mutants that are put into the environment, they may also extract an organism that has evolved to the point where it can break down one pollutant. The scientists' goal is to change the organism

so that it will be able to deal with more than one pollutant.

At this point, Dr. Wyndham is working chiefly with chlorobenzoates and chlorophenols, the principal pollutants at the Hyde Park site in New York State.

Situated on the Niagara Escarpment between Lewiston and Niagara Falls, New York, the site was opened 30 years ago. Here, Bloody Run Creek incorporates both ground and surface water. Professor Wyndham's research is aimed at detecting how the micro-organisms in that water have evolved since the landfill site closed 10 years ago.

"You would expect that 30 years would be enough time to start evolution, and in fact, they have evolved," he says.

"Micro-organisms evolve very quickly: often they change overnight."

The organisms at the Hyde Park site have evolved to the point that they can completely break down chlorobenzoates and chlorophenols. Ironically, however, their ability to change further, and thus deal with other toxins, is limited by a lack of the simpler things in life, such as phosphates and nitrates.

"We have cleaned these out of the Great Lakes in an attempt to clean up the bacterial growth," says Professor Wyndham. "In so doing, we have limited the nutrients needed by micro-organisms to enable them to deal with toxic chemicals."

Dr. Wyndham believes we are doing well in our fight against pollution, but says one area in which we are failing is our tendency to put almost anything into the environment.

"Obviously the real solution to our toxic chemical pollution problem is simply to not dump toxic chemicals into the lakes," he says.

"Research like this shows you can dilute pollutants, but if they are diluted too much, the concentration becomes too low for the natural bacteria to be concerned with breaking them down. Then we are left with unchanged toxins that are still dangerous to people and the ecosystem."

The answer to toxic chemical pollution lies in the treatment of polluting substances in controlled, closed, waste treatment systems located at the factory of plant, he says. More and more companies are finding that it makes economic sense not to pollute, and are treating their waste chemicals on site.

In the long term, Professor Wyndham's research plans involve a slightly different although related area of microbiology.

Since plants are often a source of complex organisms, he plans to make good use of the plant life in Carleton's Environmental Laboratories to study the bacteria that live around plants and how they metabolize compounds.

From an evolutionary standpoint, he says, it would make sense to go back to plants to find the source of the organic fight against pollution.



Brian Eastwood and Shirley Mills in new statistical consulting centre.

New Centre Opens

A new Centre for Statistical Consulting opened on the campus this fall.

Funded with a research leadership grant from the Ontario government, the Centre is designed to be a focal point for statistical consulting at Carleton, says its director, Professor Shirley Mills.

"We'll be trying to encourage collaborative research efforts among faculty, and involve statisticians in the design of research projects," she says.

"Often, data is already collected and may be an absolute mess or could have been better."

Professor Mills describes her role as one of being a link between the centre, which is an administrative unit, and the Department of Mathematics and Statistics. It's a key role.

"We've got people who are developing new methodologies that should be getting out into the field," she says.

"We hope we'll be able to do this more quickly through the centre."

Similar centres are found in about 10 universities in Canada, she notes, but Carleton's is unique in having a full-time manager consultant.

Brian Eastwood came to Carleton from North Carolina State to assume the post.

He says the biologists are the biggest users of the service so far, seeking advice for projects covering everything from bird behaviour to nitrogen fixation in plants.

The Department of Psychology is also a major user of the centre, he adds, and with increasing use of micro computers in all areas of research, he expects there will be a growing list of users.

The Centre will provide routine assistance using known statistical techniques; innovative and sophisticated application or adaptation of known statistical methods; and the creation of new methods designed to provide a solution to an important problem in some investigation.

Carleton Revisited

Bill Seabrook, BSc/60, MSc/64, delivered the inaugural H.H.J. Nesbitt Lectures in Science at Carleton on November 27.

Named in honour of Bert Nesbitt, the acclaimed founding Dean of Science at Carleton and now a Professor Emeritus, the annual lecture will feature a Carleton science graduate. Dr. Seabrook, Dean of Graduate Studies and Research at the University of New Brunswick, spoke on his research related to insect pheromones (sex hormones), and their use in controlling spruce budworm.

He stopped by the Alumni Office before the lecture to recall his student days at Carleton.

"It was a remarkable experience," he says. "The professors gave so much of themselves to their students. More than what you learned in the classrooms, you learned their attitudes, what made them tick. There was a fantastic esprit de corps."

He recalls of 12 students who were studying zoology while he was a student, 10 went on to get their PhD.

"That's an outstanding record," he says.

Born and raised in Ottawa and a graduate of Glebe High School, Dr. Seabrook says his decision to come to Carleton came about largely because he used to babysit for Bert and Betty Nesbitt. "It wasn't a great intellectual decision by any means," he laughs.

After graduating with his BSc, he married and moved to St. John's, Newfoundland, where he worked with the then Canadian Department of Fisheries. He resigned his position to take a Master's degree at the University of Toronto, but came to Carleton instead when he found that the University would not recognize some of the courses he had taken here.

He adds it was a good decision, however. "I had originally come to work on aquatic biology, but after six months, shifted to invertebrate nervous systems and, in effect, became Bert Nesbitt's student. I wouldn't have done it if I had stayed in Toronto."

After graduating for the second time from Carleton, it was off to the Imperial College of London for his PhD and then to the University of New Brunswick, where he has been for the past 20 or so years.

"I have all the challenges I can handle here," he says. "I've been very lucky, I've got good research facilities, good money, and I've been able to do a lot of work on spruce budworm. I haven't had time to get bored."

This year, his son David, is enrolled in the one-year Bachelor of Journalism program.

"It thrills me to see the Carleton University of today," he says. "It's become a major Canadian institution, something to be reckoned with."

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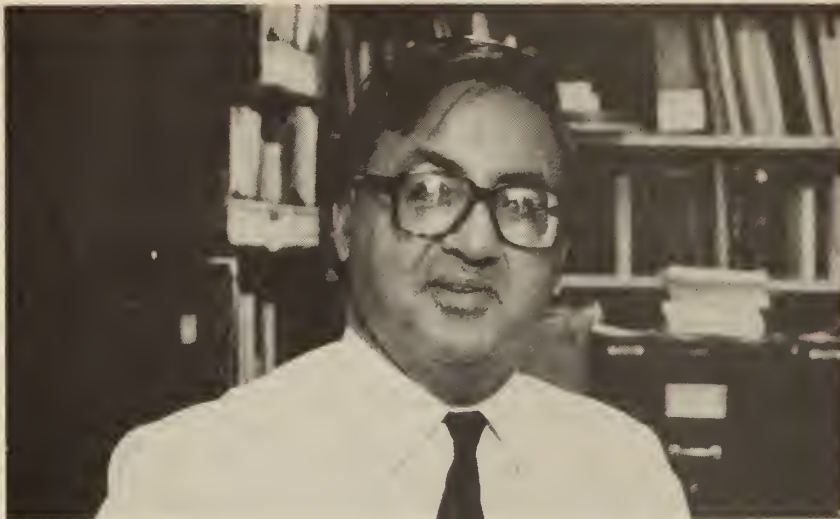
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Herb Saravanamuttoo: Concorde was a technological success, but an economic disaster.

Reflections of Concorde

It was April 9, 1968, and Herb Saravanamuttoo was sitting on a runway at a Bristol, England, airport watching the inaugural flight of the world's first supersonic airliner, the Concorde.

"It was very exciting," he recalls. "Of all the things I have ever worked on, the Concorde was definitely the most satisfying."

A Professor of Mechanical and Aeronautical Engineering at Carleton, he teaches courses on gas turbine engines, power plants, and thermodynamics.

During the time of the development of the Concorde, he was at the University of Bristol in Britain studying for his doctoral degree. He became involved with the Rolls Royce company in developing a mathematical model of the Concorde engine, which became the basis of his PhD thesis.

Professor Saravanamuttoo's mathematical simulation of engine thrust response was eventually used as a developmental tool for the engine, and the British Aircraft Corporation engaged him as a consultant.

He says the Concorde has the most complex intake of any aircraft currently flying.

"It requires continual variation of intakes and nozzles for optimum performance over its wide range of speeds, altitudes, engine pressures and temperatures," he notes. Despite the state-of-the-art technology, which delivers a Mach 2 speed of 1,400 miles per hour, the Concorde was not welcome in the United States until January 1976.

"The sonic boom, pollution, the destruction of the ozone layer, you name it and the Concorde was blamed for it," he says.

"It generated a great deal of strong reaction against the whole concept of supersonic travel."

He recalls an incident he says was typical of the situation.

"The Concorde flew into London for the

first time on a Saturday morning. On the following Monday, there was a great flood of postcards complaining about the noise that the airplane had made. Then it was noticed that the cards had been posted *before* the Concorde had arrived."

What it has come down to is that the Concorde has been a technological triumph and an economic disaster.

"It cost British and French taxpayers £ 2000 in start-up costs. In 1984, the British government wrote off capital expenditures and cut the annual £ 18,000,000 in support costs that they had been providing after a House of Commons committee described the plane as a white elephant."

He adds that after more than a year of negotiations, British Airways paid £ 16,500,000 for financial independence. Only 16 airplanes have been built to date, and only a dozen are in operation now.

"At one time, there were over 70 planes on order," says Professor Saravanamuttoo, "but many of the airlines thought it was too much of a commercial risk since approval to land in New York was still in doubt."

U.S. law required environmental impact

hearings before the plane was allowed into the city, which was thought to be the Concorde's main market.

Today, supersonic flight is still illegal over the United States, and the Concorde is restricted to flying over water. Professor Saravanamuttoo notes, however, that both the U.S. Air Force and the space shuttle make a significant number of sonic booms over the U.S., apparently with little complaint.

Several years ago, Professor Saravanamuttoo got an opportunity to experience a Concorde flight from London to New York for himself.

He said the Atlantic crossing was similar to flying from Ottawa to Calgary. His flight left London at 6 p.m., and arrived in New York at 5 p.m. the same afternoon.

"The flight was very smooth because the Concorde flies up to 60,000 feet high, above the turbulent air that sometimes give other planes that fly at lower altitudes a rough ride.

"The other difference was that the Concorde's windows were warm to touch compared to the coolness of the windows of other planes. A gauge monitoring the airplane's skin temperature showed 108° Centigrade; in other words, above the boiling point of water."

This kinetic heating effect means the Concorde structure is operating above 100° Centigrade most of the time.

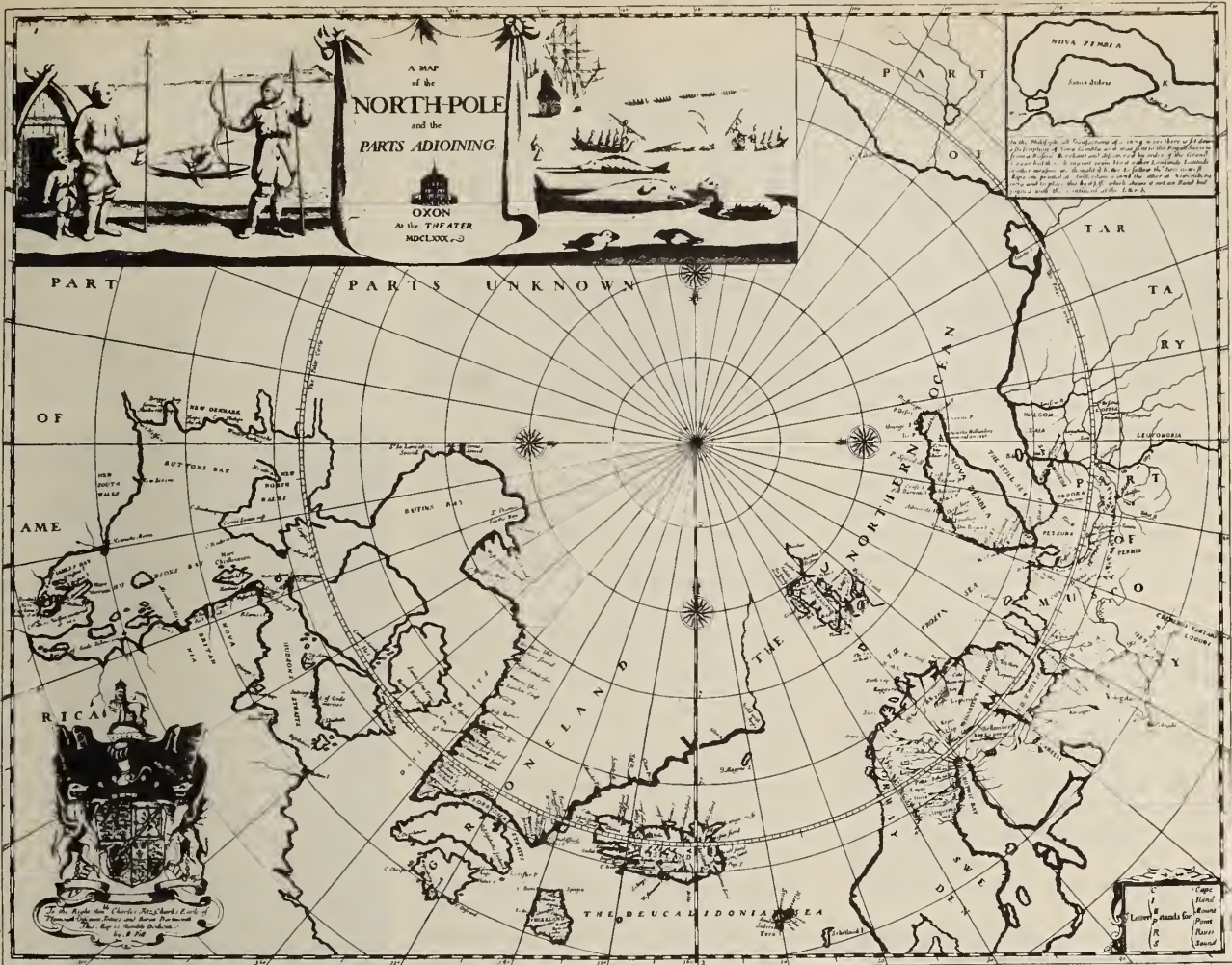
"There is no other airplane that can do that," says Professor Saravanamuttoo.

He notes that for more than 10 years now, the Concorde has been routinely flying back and forth across the Atlantic, transporting thousands of travellers each week (who pay more than double the normal airline travel price for the convenience and speed).

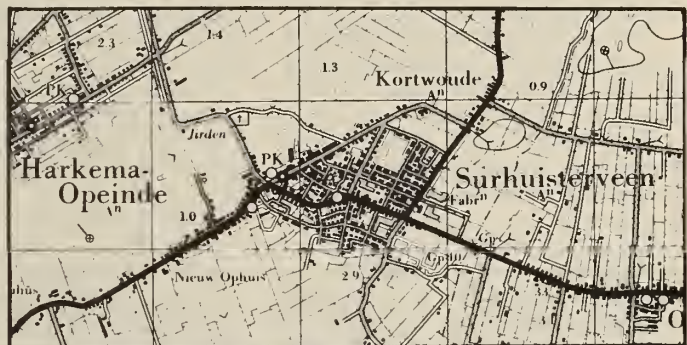
The Concorde is also proving extremely popular for special charter flights to unique destinations and as a link with luxury cruises by the Queen Elizabeth II.

Concorde operations will continue into the future, the limiting factor being airframe life and the continued availability of spare parts. British Airways clearly sees operation up to the Year 2000 and probably beyond. Adds Professor Saravanamuttoo, several major U.S. companies are carrying out studies which may lead to a successor which will employ the latest technologies.

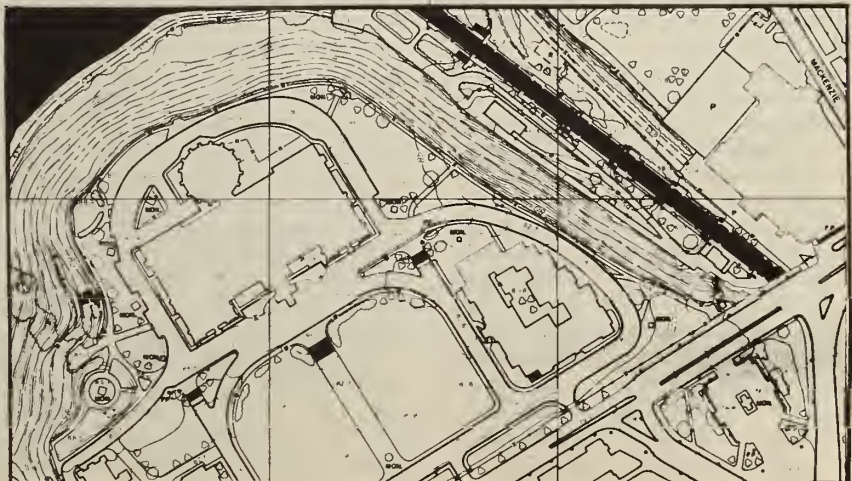




WORLD OF MAPS



Carleton's Map Library, located on the second level of the Loeb Building, houses an extensive collection of more than 70,000 maps, 5000 atlases, 15,000 air photos, plus globes, gazetteers, and maps on microfilm, slides and transparencies. The collection includes everything from navigation charts for air and sea, to route maps for travel, field trips and vacations. Samples from the collection reproduced here are (top to bottom): map of northern hemisphere, first published in 1680, and reproduced from the original in the Public Archives of Canada by the Association of Canadian Map Libraries, in co-operation with Carleton; topographical map of the Netherlands; mylar of the National Capital Region, showing Parliament Hill.



Science at Carleton

Like one of the magnificent blooms in its greenhouses, Carleton's Faculty of Science is flowering beautifully.

A carefully nurtured educational philosophy and diversity of research initiatives have combined to create an exciting and exacting centre for scientific research and study that too often goes unnoticed.

For though its reputation is largely that of a liberal arts university, Carleton has become one of the top universities in Canada for research in areas such as plant and cell physiology, high energy physics, and probability and statistics. The university's scientists are collaborating on international projects, and they're changing some of the fundamental ways we understand the world.

In fact, close to \$6 million in external grants and contracts are awarded to the some 125 scientists at Carleton annually. Dean of Science Les Copley (who graduated from Carleton with his BScHons in 1964) is proud of the Faculty and its research achievements.

"We provide an opportunity to work with and be taught by really first-rate scientists who are very active in their particular field," he says. "Students get introduced at a fairly early point to the issues, techniques, and methods that are relevant to modern research."

He adds that the research initiatives of the faculty are what distinguishes science at Carleton from other universities.

"I feel it is the research conducted by the faculty that makes the instructional programs we offer different from those of other universities," he comments.

"Every science faculty offers the same basic courses. What makes Carleton a unique experience is the people students come into contact with."

The Faculty includes the Departments of Biology, Chemistry, Physics, Earth Sciences, and Mathematics and Statistics; the School of Computer Science; and the Institute of Biochemistry. Each of these units has developed its own areas of strength and approach to research.

Possibly the most specialized department at Carleton is Physics. Over the past two decades, the Department has developed a close relationship with the National Research Council to build a world-class research team in high energy physics.

Today, Carleton's physicists have been involved in experiments at every major accelerator facility in the world. Currently they are heavily involved with the OPAL project at CERN in Geneva and are working on a novel proposal to build a neutrino observatory in Sudbury.

Jokes department chair, James Hardy, "Our experimentalists are suitcase physicists, preparing to work in labs not even on this continent."

He adds an important point. "Although the apparatus isn't at Carleton, the preparation and data analysis — the physics as distinct from the collection of data — is done here."

Including researchers from NRC and the Institute of Particle Physics who work at Carleton, there are now more than 20 scientists involved in high energy physics. But even as the department has consolidated its strength in this area, it is branching into a new one.

"Medical physics is becoming a mainstream of experimental work here," says Professor Hardy.

"We're interested in the application of physics to medicine in areas such as ultrasound and scanning, basically looking at creating images of what's going on inside the body for diagnostic and treatment purposes."

While the physicists have developed a highly specialized research program, most other departments have adopted a broader approach.

"When the biology department began to grow in the '60s, we decided not to specialize, but to try to get key areas represented," says department chair, David Gardner. "We find ourselves covering enormous territory of interest within a not terribly big department."

He describes the department as "a blend of the possibilities of basic and applied research."

He gives as an example work he is doing with Professor John Lambert on natural product pesticides.

"Secondary metabolites of plants can be used to dissuade insects from destroying our crops, and we'd like to take advantage of this protection to use it to our advantage," he explains.

"To do that, we need to do basic research in plants. We have to find out why an insect doesn't like the compound."

He notes that Professor Margaret McCully is "making considerable inroads on the relationship between soil microbes and corn roots. She's produced some information on cellular organization in plant leaves that will require us to write a new textbook."

"We have Cam Wyndham interested in the use of bacteria to destroy secondary waste products, sludge and what have you. On the very pure side, Nathalie Chaly is making tremendous strides in examining what happens in the nucleus when the cell divides."

Ron Shigeishi, who chairs the chemistry department, says the philosophy of this department, too, has been to span a lot of areas.

"We have people working in the traditional areas of physical, organic, inorganic, even analytical chemistry, though this last area has been downplayed across the country despite the fact that it's of major interest to industry," he says.



He also notes that a toxicology research group, unique to chemistry departments, is now an important part of the department's research program.

Professor Shigeishi points out that contract funding is important to research both in the department and throughout the University.

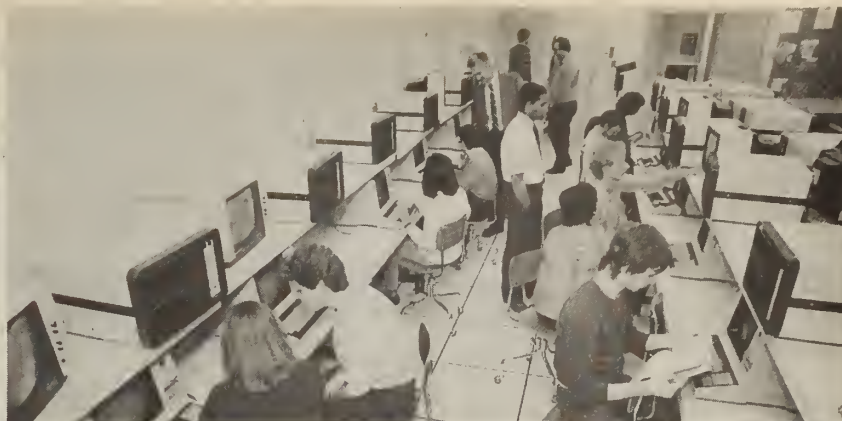
"Contracts mean that money comes into the University for overhead costs," he explains. "Sometimes, people come to us with proposals, but we also go hunting for them. If they fit in with our research interests, we'll accept them, because it's a way of funneling more money into the department and of funding more research."

The School of Computer Science has adopted a similar aggressive approach to research funding.

"Our connections with business are increasing all the time," says the school's director, John Pugh.

"One way we've been able to do that is through the Ottawa-Carleton Research Institute's special interest groups. Two of these groups were founded by computer science faculty and are organized and run by us."

Just eight years old, the School has quickly grown into a significant component of the Faculty, and has established four organized



research units, each dealing with a specific topic: object-oriented programming; distributed computing; intelligent systems; and algorithms and complexity.

"The School has grown to the stage where its faculty members, and its programs are firmly in place," says Professor Pugh.

"Our graduates are probably the best way of building our reputation. They're helping us now, and they're much sought after."

The Department of Earth Sciences has also established a solid reputation for the quality of its graduates.

"A few years ago, the Canadian Geoscience Council commissioned a report in which employers were asked what they thought of undergraduate geologists in Canada," says the department's chair, Giorgio Ranalli.

"We were in the top five."

The main research concentrations in the department are resource geology, including mineral and oil exploration; precambrian geology and the study of the precambrian shield; structure and geodynamics, including tectonics, and studies of permafrost.

"Earth sciences regards itself as a professional school," says Professor Ranalli.

"There is a three-year program, but we don't encourage it and most of our students are in the four-year program. We want to

train professional geologists who are employable in their profession. We're very concerned about quality."

The reputation for quality extends to the Department of Mathematics and Statistics, where students have consistently performed well in North America's prestigious Putman Competition. Cyril Garner, chair of the department, comments that last year, Carleton ranked 14th of 245 schools participating in the competition.

Of all the departments in the Faculty, Math and Stats faces the biggest challenge of defining a concise research program. Notes Professor Garner, that although the Department is more oriented to science, there's definitely a humanities side to math as well.

"Math forms the core of many programs in the university, including engineering, science, business and architecture. You can combine degrees in math and almost anything else, and graduate with either a BA or a BSc."

Yet despite the enormous range of demands, the department has developed two outstanding strengths.

"We're one of the strongest groups in Canada in probability and statistics and in algebra," says Professor Garner.

Although the Faculty is, by the very nature of its subjects, more departmentally centred than other faculties, still there's an impressive degree of intermingling. The Institute of Biochemistry is a formal example of links between biology and chemistry, while the School of Computer Science is a blend of science, engineering and business.

Combined honours programs exist throughout the Faculty, and an interdisciplinary science studies program gives even more flexibility.

The Faculty is further strengthened by joint programs at the graduate level with the University of Ottawa. In most cases, the two universities have developed complementary strengths that, when combined, provide outstanding opportunities to students.

Professor Hardy notes, for example, that while Carleton has specialized in high energy physics, the University of Ottawa has focused on solid state and low energy physics.

Carleton has reached out even further into the Ottawa community by involving professional scientists in government and industry as adjunct professors who assist with graduate supervision and seminars at the University.

In the Department of Earth Sciences alone, notes Professor Ranalli, there are seven adjunct professors, from Energy Mines and Resources, the National Research Council, and industry.

"They enlarge our horizons very much," says Professor Ranalli.

"They're not doing our work, but it's fortunate for students who have problems to know that they can get in touch with a specialized practitioner in the field."

The departments are, without exception, proud of their students, and try to build strong ties with them.

Notes Professor Shigeishi, "We have a final year honours project which I think is extremely good, and that's true for all departments."

"It involves research over an entire academic year and in essence, means the students write a mini-thesis which they have to defend in front of a panel of professors."

"The trouble we go to in doing that is a reflection of how we treat our students."

Earth sciences, with its field camps, probably builds the strongest ties between students and faculty.

"When you go somewhere and spend a week or two looking at rocks, you become friends," says Professor Ranalli.

While most of the Faculty's programs are the traditional three or four-year versions, Earth Sciences does offer a work-study program, and the School of Computer Science has a full-fledged co-operative program in the works.

Most of the growth and development in the Faculty is expected to take place at the graduate level, except for the development of biotechnology at the undergraduate level.

"The expansion of our physical facilities is critical to us now," says Dean Copley.

"It will enable Math and Stats to come over to the Herzberg Building, which is important from the point of view of cohesion."

"Secondly, it will provide badly needed space for the expansion of our research and graduate programs."

The winning of awards, new program developments and growth in research activities, have all served to boost morale in the Faculty, he comments.

"There's a spirit of community, a sense of mission, and optimism for the future."

President's Message

by James Watson

In conjunction with the Challenge Fund, the Alumni Association is literally branching out across Canada.

Since the summer, new branches have been established in Vancouver, Victoria, Edmonton, Calgary, Winnipeg and Montreal, while efforts are currently underway to establish one or two branches in the Atlantic provinces as well.

In addition, for the past several years, alumni in Toronto have played a leading role in branch activities, and this year will be organizing their fourth annual Spring Fling.

The Alumni Association believes that branches are an important component of the alumni organization. They are a natural desire of former students to participate more fully in the life of their Alma Mater, to maintain and develop friendships with other alumni, to share nostalgic links to the past, and to continue to nurture the education-for-life experience.

Among the functions that branches perform are: keeping alumni informed of University activities; providing a forum for alumni to meet each other in their communities; renewing friendships developed at the University; assisting in student liaison; providing informative and educational programs; and encouraging participation in the annual fund and capital campaigns.

The impetus for this upsurge in new branches has been the Challenge Fund, since an important part of the alumni fundraising effort will be personal canvassing. But organizers recognize that once the Challenge Fund is over, they will continue as an enduring legacy for the Association and the University in the years to come.

If you live in any of the communities named above, you can be sure you'll be hearing from your branch committee sometime soon.

Already, events have been held in Winnipeg and Edmonton, and one is scheduled for Calgary in January.

You can help to make these programs a success by getting involved, coming out to social occasions, mingling with other alumni, and perhaps raising a glass or two for the Alma Mater.

In alumni affairs, we're hoping that distance makes the hear grow fonder. Stay in touch with the University through the Alumni branch in your town.

Loyalist Collegiate and Vocational Institute in Kingston is celebrating its 25th anniversary May 6-8, 1988. For information, please contact Ruth Bedford, 25th Reunion Coordinating Secretary/Treasurer, c/o LCVI, 153 Van Order Drive, Kingston, Ontario, K7M 1B9, (613) 546-4348.



Alumni-Students Meet for Dinner

More than 170 alumni and students gathered in the Faculty Club for the first annual Careers Insight Dinner, held November 27, 1987.

Organized jointly by the student and alumni associations, the dinner provided an opportunity for students interested in a career to sit and talk informally over dinner with a graduate working in that career area.

Graduates representing careers in law, psychology, teaching, social work, public administration, journalism, engineering and other fields were on hand for the dinner.

It was judged a virtually unqualified success, with conversation at the tables ranging from comparing notes on professors at Carleton, to the reality of working at a day-to-day job.

The purpose of the dinner was to raise the profile of the Careers Insight program, which was started on campus last year. The basic concept of the program is to put students in touch with alumni working in a career they're interested in pursuing.

Depending on circumstances, it could involve spending a day or more at the workplace with the graduate, to having lunch together, or simply meeting on campus.

The program has been received enthusiastically by alumni, but organizers would like to see increased student awareness and participation.

"We think it's a great way for us, as alumni, to be of direct assistance to students at Carleton today," says Jeff Rochon, the Alumni Council's coordinator for the program.

"We hope it meets a real need with students, and the proof will be in how readily they use the service."

Alumni interested in volunteering for the program can indicate their interest on the return coupon on page 24 of this magazine, or call Development and Alumni Services directly at (613) 564-2800.



CBC national news reporter and Carleton graduate Jason Moscovitz was among alumni present at the Careers Insight Dinner, November 12, 1987.

Washington Grads

The 12th annual reception and dinner/dance for all Canadian university alumni, spouses and friends living in the Washington, D.C. area will be held in Washington, D.C. on Saturday, April 16, 1988. Alumni living in the region of Washington D.C., New Jersey, Delaware, Virginia, Maryland, Pennsylvania, and North Carolina will be receiving further information from the organizers of this event.

California Grads

The annual dinner for Canadian universities alumni who are resident in northern California will be held in San Francisco, February 23, 1988. The dinner is sponsored by the Canadian American Society and Chamber of Commerce of Northern California, the Canadian Consulate General, The University of Toronto Alumni Branch, and the Canadian Studies programs at Bay Area universities. Information may be obtained by writing or telephoning: Public Affairs Section (Alumni Dinner), Canadian Consulate General, One Maritime Plaza, Suite 1100, San Francisco CA 94111, (415) 981-2670.

New Life Insurance Program Launched

The Carleton University Alumni Association is pleased to announce the endorsement of an important new benefit: a low-cost term life insurance plan.

This plan has the full support of the Association and is designed for us by North American Life, a company which provides insurance services for the alumni of more than 30 universities and colleges across Canada.

Because of the large size of our Association, we qualify for special group rates. For example a non-smoking man between 30 and 34 years of age can purchase \$108,000 of coverage for under 40¢ a day. And premiums for women are even less.

The program is flexible enough to meet almost any individual need — it can help you start a good basic life insurance plan, or supplement existing protection. Coverage for term life is in units of \$27,000 to a maximum of \$216,000 per person, and spouses are eligible for the plan. Dependent children can be insured, and personal accident insurance is available to help protect against the financial consequences of a serious accident.

There are a number of benefits to the plan:

- **Portable coverage** Unlike insurance that may be provided through an employer, this coverage remains in effect even if you change jobs.
- **Waiver of premium** Premium are looked after for you, and the policy remains in force, if you become disabled and cannot work.
- **Guaranteed renewable** Once you are insured under this plan, no medical evidence is required to renew your coverage even if your health should deteriorate.

One of the unique features of the plan is the insurance continuation benefit, which guarantees \$3,000 worth of coverage for each unit of member term life held at age 70, *premium-free for life*. This benefit is a big plus, since most term plans end at age 65.

An information package and special introductory offer will be sent to alumni in



James Watson, President of the Alumni Association, and Otto Jelinek, Minister of State for Fitness and Amateur Sport, were together again at the Alumni Association's fall luncheon, held at the National Arts Centre, November 27, 1987. Close to 100 people were on hand to hear Mr. Jelinek talk about the 1988 Winter Olympics in Calgary. (Mr. Watson, now Director of Communications for Parliament Hill, is Mr. Jelinek's former press secretary.)

January. Watch the mail to discover how your Association program can help provide financial protection for you and your family. If you would like to find out more about the plan, call North American Life, toll free, at 1-800-668-0195. Or contact Bob Sonier, the Carleton Alumni Insurance Consultant, at (613) 722-1742.

Alumna Wins Writing Award

Olive Senior, BJ/67, has won the inaugural Commonwealth Writers Prize.

A resident of Jamaica, she was nominated for her collection of short stories entitled *Summer Lightning*, set in rural Jamaica.

Organizers said the collection "brings to life with power and realism... a whole range of emotions from childhood hope to brooding melancholy."

Established by various groups promoting closer Commonwealth ties, the new prize is designed to reward and encourage new Commonwealth writing and ensure works of great merit reach a wider audience outside their own country.

The announcement of the award was made in December.

In Memoriam

John MacLeod Morton, the first chairman of the Department of Chemistry at Carleton, passed away on October 29, 1987, in Smiths Falls, Ontario, after a lengthy illness. A graduate of Dalhousie and Princeton Universities, Dr. Morton came to Carleton in 1947 and became a full professor in 1957. During the early years, he was a one-man department, serving as lab instructor, lecturer, and departmental purchasing agent. He was soon joined by James Holmes and Paul Laughton and, together, they shaped the Department of Chemistry. He served as chairman of the department until 1957, and taught until he retired in 1971.

Allan Barclay Roger, DPA/55, died of heart failure at Hotel Dieu Hospital, Kingston, Ontario, on September 4, 1987. He was 57. As a career foreign service officer, he served in various capacities in Ottawa and overseas, including the Dominican Republic, Brazil, Denmark, Finland, and as Deputy High Commissioner in Australia. Since 1976, he has held ambassadorial posts in Guyana and Suriname, Barbados and the Island States of the Eastern Caribbean and was the Deputy Commandant of the National Defence College in Kingston at the time of his death. He was actively interested in the areas of public information and foreign aid.



Carleton student Robert Haller has been putting in extra hours in the Alumni Office, using a newly-acquired computer database to help trace some of the Alumni Association's 14,000 "lost" grads. Talk about "the task eternal," eh Robe?



David Vice received the Alumni Award from Association President, James Watson.

Alumni Weekend '87 In Retrospect

Everything from official Alumni Association business to splashing fun in the Athletics Centre's wading pool was included in this year's Alumni Weekend, held September 25-27.

The weekend started with a champagne reception and annual meeting, attended by 60 graduates on Friday night.

James Watson, BA/83, Director of Communications for Parliament Hill was re-elected President of the Association. **Clayton Beattie**, BA/54, retired Brigadier-General, remains as Vice-President, and **Peter Pivko**, BArch/74, was elected secretary-treasurer.

New members elected to the Alumni Council at the annual meeting were: **Bill Clark**, BA/74, Director of Planning, City of Nepean; **Rose Marie Earle**, BA/69, Assistant Vice-President, Johnson & Higgins Willis Faber, Toronto; **Warren Kinsella**, articling lawyer, Gowling and Henderson; **Jack McAuley**, BA/74, sales representative, London Life Insurance; and **Sharon Rusu**, BA/75 (SPC), BAHons/76, MA/79, Resettlement Counsellor, UN High Commission for Refugees.

On Saturday afternoon, Dave Barrett, former Premier of British Columbia, was on hand for a colloquium for social work alumni, fittingly titled, "Dave Barrett's Crystal Ball: Social Policy Odyssey 2001." The colloquium will be an annual part of the School's participation at Alumni Weekend.

On Saturday evening, the scene shifted to the National Arts Centre, where more than 300 people were on hand for the annual dinner/dance. David Vice, MEng/76, President of Northern Telecom Limited, was presented with the 1987 A.D. Dunton Alumni Award at the dinner. The award consisted of a print of the Thessalon River by Carleton alumnus, Robert Carmichael, BA/64, whose drawing of a loon was chosen for the new dollar coin.

The evening was also marked by special receptions to celebrate the 30th anniversary of the introduction of the Bachelor of Engineering program at Carleton, and the



James Downey returned to Carleton to speak at the Sunday Brunch.

establishment of the Institute of Canadian Studies.

On Sunday, it was back to the campus again for the traditional Sunday brunch. James Downey, President of the University of New Brunswick and former Vice-President of Carleton, entertained more than 100 guests with witty and anecdotal reflections on the life of a university president.

At the same time, another 100 alumni and their children were having fun in Carleton's pool at Sunday-Funday, which featured diving and synchronized swimming demonstrations, and a bubble bath in the wading pool.



Dave Barrett at Social Work Colloquium.



Engineering grads look through old yearbooks at the Faculty's 30th anniversary reception.



The bubble bath at Sunday-Funday was a hit with the "Class of 2010."

Special thanks go to groups and individuals who contributed services, goods and door prizes for the weekend, including: Brights Wines Limited; Budget Rent-a-Car; Capital Foods; Capone's Restaurant; Carleton University Athletics Centre and Bookstore; CHEZ-FM; Classic Books; Fines Flowers; Flippers Restaurant; Kamal's Restaurant; Martin McKale Petro Canada; Mexicali Rosa's; National Arts Centre; Prim Crime Bookshop; Prospero Books; Tommy & Lefebvre; Travac Travel; Tri-Graphic Printing; York Advertising; Wallack's; and Ziggy's Hair Design.

Davis Engineering Has Carleton Connections

Roland Davis, BEng/66, MEng/67, has engineered a unique niche for his company, Davis Engineering.

From his east-end Ottawa office, he's mounted an international marketing campaign for highly specialized products his company has developed.

"It's a big change and very expensive," he admits, "but we hope we'll be successful. Early indications are that we will."

Products he'll be marketing to Western countries include a mechanical device for cooling exhaust fumes from gas turbine engines to avoid heat seeking signals, and an electronic black box which reduces or eliminates the electro-magnetic signal caused by a ship's propeller.

"The key word for both of these devices is stealth," he says. "Both are passive defence devices that are designed to make vehicles quiet and unobtrusive."

Designed for the Department of National Defence, the devices are now being installed on the new Canadian Patrol Frigates, and on the Tribal class destroyers.

"We've almost saturated the Canadian market, so now we're out to market them in the Western world," says Mr. Davis.

This year, he says his company will do \$10 million worth of business. It employs 90 people, including 30 professional engineers, 12 of whom are Carleton alumni.

"We do a variety of work, but we're predominantly a mechanical engineering company," says Mr. Davis.

"The brunt of what we do is research and development projects for the federal government. Transport Canada and the National Research Council are two of our biggest clients."

As with many other companies of similar size in Ottawa, the fortunes of Davis Engineering are closely linked to the federal government.

Mr. Davis recalls the company itself was established in 1975, when the government announced its "make or buy" policy, whereby it would contract out research and development to Canadian industry, rather than do it in government labs.

At the time, he was working for Carrier Corporation in Syracuse, New York. But previously, as a university researcher at Carleton, he had done some consulting work for small companies and had enjoyed the experience.

"The combination of the new policy and the chance to work independently were very attractive, so I said I'd give it a shot and moved back to Canada," he said.

The first year was pretty tough, he recalls. "I'd have to work directly on a contract and at the same time be out looking for a new one so we'd always have something to do."

But times were good, and the business grew quickly. In 1976, he went into partnership



Carleton graduates at Davis Engineering with gas turbine exhaust cooler in background: (front l-r) Tony Bosik, BEng/72, MEng/77, Vice-President Engineering; Roland Davis, BEng/66, MEng/67, President; Tim Dunn, BEng/78, Senior Engineer, Mechanical; Doug Wong, MEng/86, Manager, Electronics Division; Mark McCarthy, BEng/87, Junior Engineer, Mechanical; and Larry Hill, BEng/86, Junior Engineer, Mechanical. (back, l-r) Stewart Bain, BEng/85, MEng/86, Intermediate Engineer, Mechanical; Sylvie Jones (Choquette), BEng/86, Junior Engineer, Mechanical; Paul Belloni, BEng/81, Intermediate Engineer, Mechanical; Adri Coppens, BEng/77, Senior Engineer, Mechanical; Wayne Giddings, BEng/75, Senior Engineer, Mechanical; and Gary Roberts, BEng/80, Senior Engineer, Marketing.

with a friend and former classmate, Dennis Eryou, MEng/67.

"We made the classic business mistake of overextending ourselves," he says.

"We grew very quickly and formed a second company, both of which were overextended. We were doing a lot of government contract research and development, so when the Conservatives were elected and put a freeze on all government spending, we got into big financial trouble."

The partnership between the two grads was dissolved as a result, when the second company was sold in 1980, with each staying with one company.

Over the years, Mr. Davis has maintained close connections with Carleton.

"We've had a lot of help from Carleton grads," he says.

As well, he often sub-contracts projects to Carleton faculty, including Steen Sjolander, Archie Bowen, Joe Wong and Werner Richarz.

"I'd like to see more of a connection between university and business," he says, "but it's not all that easy to achieve. They have their own pressures quite different from the ones we face."

The father of four children, aged 10-23, his oldest son, Steven, is also an engineering grad from Carleton, Class of '86.

He doesn't think a great deal had changed for his son, compared to the days when he

was a student. "Engineering students had a large number of contact hours and so the class tended to keep itself separate," he said. "I think that's still pretty much true today."

While he was a student, the Faculty moved from a floor in the Tory Building to its present quarters in the Mackenzie Engineering Building. The Dean of Engineering was John Ruptash.

"He was a very strong dean," says Mr. Davis. "He was so enthusiastic and dynamic, it tended to rub off on the students. He influenced a lot of us."

Mr. Davis still favours the common-core curriculum which John Ruptash pioneered at Carleton.

"My vote would be for a longer common core rather than a shorter one," he says, "simply because there's no way you can become a specialist in anything in four years. You really have to go on to graduate school to be a specialist."

"If you were a normal student, planning to finish in four years, you'd be better off to get the fundamentals of each discipline."

He adds this is especially true for mechanical and civil engineers. "You can't exist in today's world as a mechanical engineer without good appreciation for electronics. To ignore that aspect, you just won't be turning out as good a product or service."

Through the Years

M.W. Steed (Rutherford), BA/54, has moved to Vancouver from Nelson, B.C. to study music therapy at Capilano College.

Donald B. Ferguson, BA/56, is Senior Investment Officer with the Royal Trust Company in Ottawa.

Michael J. Weeks, BSc/61, was named Director of Education for the Oxford County Board of Education beginning August 1, 1987.

William E. Hare, BA/63, BD/65 (Queen's), received his MA in pastoral studies from the University of Ottawa on October 18, 1987.

W. Richard Cowan, BA/64, MSc (McGill), PhD (Colorado), has moved from Calgary to the Toronto area to take up a position with the Ontario Ministry of Northern Development and Mines.

John R. McCann, BA/64, is a Division Manager with Berry Associates Inc. in New Jersey.

Allan Jacques, BCom/66, and his wife **Geraldine (Forma)**, BA/69, have two children: Matthew and Heather. They moved to Regina in August 1987. Allan is Regional Director General of Employment and Immigration Canada.

John M.A. McKay, BCom/66, married Lynn Cherney on May 23, 1987 in Little Rapids, Ontario. They are now living in Ottawa where John continues as a management consultant.

Thomas Morton, BEng/66, has been elected to the Board of Directors of Southern Gas Association in Dallas, Texas.

Anthony Ross, BEng/66, has been appointed Group Publisher for Canam Publications, with overall management responsibility for the corporation's several consumer and business magazines.

Nicole M. Deschenes, BJ/67, is Director-General of Communications for Fisheries and Oceans Canada. She was elected to the Board of Governors at Carleton University in September 1987.

Robert Fraser, BSc/67, was appointed Marketing Manager of Pegasus Industrial

Specialties Ltd. in Toronto in March, 1987. **Duncan Meikle**, MA/67, BA/61 (McMaster), and his wife, Alison, have opened a bookstore in Perth called the "Bookworm".

David Davidge, BSc/68, is a Vice-Principal with the Scarborough Elementary Public School system.

Garry Fairbairn, BAHons/68, MA/69, and **Lorna Bratvold**, BJ/78, have three children: Jordan (6), Jamie (5) and Ashley (1). Farry is managing editor of *Western Producer*, a weekly farm newspaper.

Robert Gray, BEng/68, MEng/70, and his wife Jane, have an 18-month-old son, Brian. Robert is Chief Engineer with Andrew Antenna Co. Ltd. He was Program Manager for Aerospace Radars at the Communications Research Centre of the Department of Communications.

Vera Klein (Grossman), BA/68, and her husband Leslie, recently celebrated their 15th Anniversary. They have three sons: Jeremy (12); Andrew (9); and Michael (3). Vera is Vice-President of Corporate Planning for the Boyd Group of Companies.

Geraldine Jacques (Forma), BA/69, and her husband **Allan**, BCom/66, have two children: Matthew and Heather. They moved to Regina in August 1987.

Mary Peck, MA/69, BA (McGill), published a new book in the Fall of 1987 called *A New Brunswick Album, Glimpses of the Way We Were*.

Linda Trebble (Hill), BA/69, and her husband Glen, are working in a computer company which they started in 1981. They have two children: Stacy (14), and Andrew (12).

Bill Jackson, BEng/70, and his wife **Michelle (Coulombe)**, BSc/70, have two children: Michael (11) and Karen (7). Bill is area engineer for Dome Petroleum Ltd. and is responsible for all of Dome's oil and gas production in Southwestern Alberta, Saskatchewan and Manitoba.

Beverley Kelson, BA/70, has been appointed Manager of the National Capital Region Pay Operations within the Central Directorate of Supply and Services Canada.

Ian Lithgow, BA/70, married Katherine Hurd on August 6, 1987, in Rome, Italy.

Terry Rochefort, BCom/70, MBA (York), was promoted to Director-General of Social, Economic & Technical Analysis with the Canadian Radio-Television and Telecommunications Commission.

Larry Willmore, MA/70, PhD/77, is employed with the Economic Commission for Latin America of the United Nations. After five years in Brasilia, he has transferred to Mexico City where he heads the industrial development unit.

The Carleton University
Alumni Association presents

Financial Management Seminar

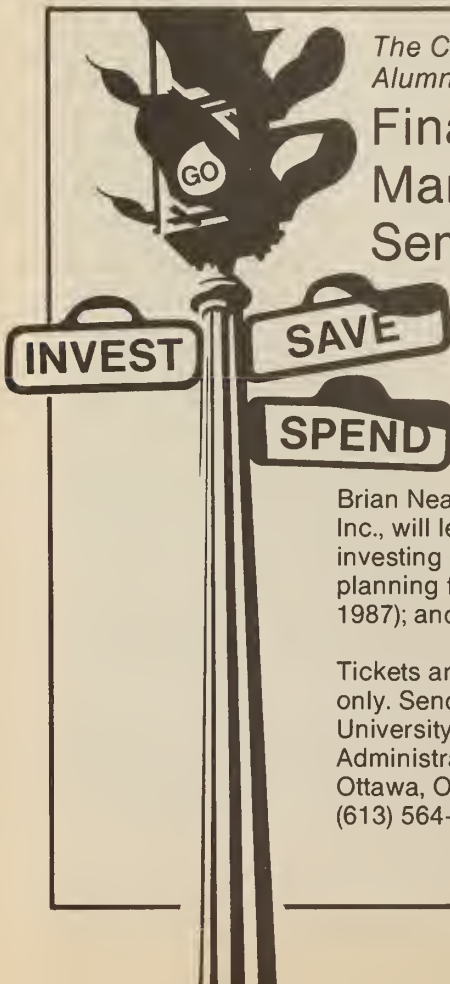
Wednesday, February 10, 1988
7 p.m.
Senate Room
6th Floor, Administration Building
Carleton University

Brian Neale, F.C.S.I., of Dominion Securities Inc., will lead this seminar. Topics will include: investing in today's tax environment; tax planning for 1988 (and it is not too late for 1987); and mutual funds: what to look for.

Tickets are \$5/person, advance registration only. Send cheque or money order to: Carleton University Alumni Association, Room 510 Administration Building, Carleton University, Ottawa, Ontario, K1S 5B6. Telephone (613) 564-2800.



CARLETON UNIVERSITY
ALUMNI ASSOCIATION



Alumni Travel

Professional Development Seminars in Portugal



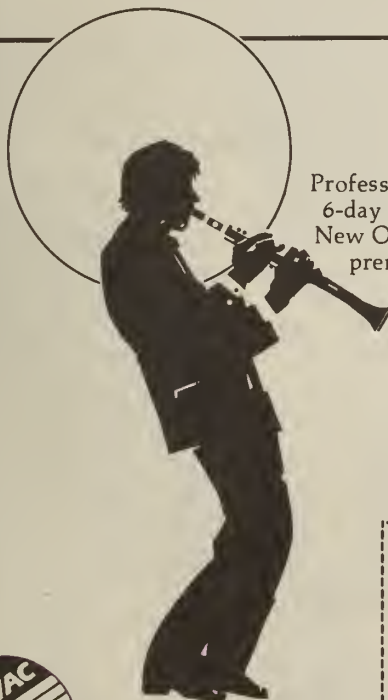
Guest lecturer, Dr. Brian Little, will lead a five-day series of two-hour morning seminars on health psychology and human personality, titled "Personality, Stress and Health: New Strategies for Muddling Through". The seminars are aimed at people in high person contact fields such as helping professions, sales and marketing, management and teaching. Among the topics to be covered are: personality and conflict; stress and coping; and health, humour, and hardiness. The presentations will involve lectures, demonstrations and self-assessment components based on recent psychological research. The seminars have a very practical focus and will involve more than an occasional touch of high whimsy. The tour departs May 1, and will be one-week in duration. Holiday extensions are available upon request.

Town and Country Walking Holiday in The Cotswold/Wye Valley

The Cotswold is one of the finest areas of unspoiled countryside in England. This walking holiday offers a leisurely, invigorating pace through scenic countryside, villages, and small towns. Walks average four or five hours a day, and will incorporate visits to archeological sites, ancient monuments, castles, cathedrals and some of the most scenic countryside in Britain. The tour departs May 17. Price is \$1,299 + taxes (airfare extra).



Jazz Tour to New Orleans



Professor Trevor Tolley, former Dean of Arts and jazz enthusiast, will lead a 6-day tour to New Orleans during Jazz and Heritage Week, April 27-May 2. New Orleans is world-famous as the birthplace of jazz, and this is one of the premier jazz festivals in North America. Professor Tolley is the President of the Montreal Vintage Music Society, and a regular contributor to the jazz magazines, *Coda* and *Storyville*, as well as being the current Chairman of Comparative Literature at Carleton.

Information

For information about any of the tour packages, complete and mail the attached coupon, or call TRAVAC Tours, (613) 728-1934. Call toll free (from Thunder Bay, Ontario, to Prince Edward Island) 1-800-267-9919.



CARLETON UNIVERSITY
ALUMNI ASSOCIATION

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Return to: Carleton Alumni Desk, c/o Travac Travel, Westgate Mall,
1275 Carling Ave., Ottawa, Ontario, K1Z 7L3.

71

James Barlow, BScHons/71, has accepted a transfer from Point Pelee National Park to Townsite Manager of Banff National Park.

Robert Lynn Ogden, MA/71, BAHons/70 (Alberta), recently left a position as Chief Executive Officer of Coteau Range Community College in Moose Jaw to become a Vice-President of Marketing and Extension of the new Saskatchewan Institute of Applied Science and Technology.

Judy O'Neill (Allan), BA/71, and her husband, **John**, BAHons/72, have two children: David (9) and Michael (5-1/2). They are moving from Whitehorse to North Vancouver.

Marsha I. Sheppard (Joynt), BAHons/71, MA/73, and Steve are pleased to announce the arrival of their second daughter Katie, a sister for Jessie.

Ernest Tannis, BA/71, is General Counsel and Vice-President of Randa Food Systems Company Limited, which operates Fat Albert's and Ralph's.

72

Roger C. Clark, BA/72, and his wife Pamela, are pleased to announce the birth of their son Tyson Charles, on July 16, 1987.

Julian Lewin, BScHons/72, and his wife, Rosalind, have four sons: David (13); Michael (11); Jonathan (8); and Steven (3). Julian worked for the Federal Government for 15 years. He is now working for the Liquor Control Board of Ontario.

Antonio J. Newton, BA/72, is teaching English and French at Broadview School in Ottawa.

John B. O'Neill, BAHons/72, and his wife, **Judy (Allan)**, BA/71, have two children: David (9) and Michael (5-1/2). They are moving from Whitehorse to North Vancouver where John has a new position with the Department of Tourism.

Bob B. Wallace, BEng/72, MEng/74 (Ottawa), MBA/82 (Alberta), has moved from Edmonton to Florida to join Geo-Services as Vice-President, Field Engineering. Bob is the author of many technical papers on geosynthetics. He is coauthor of a book on geotextiles which is to be published in 1988.

John Witney, BEng/72, is an engineer manager with Subaquatics Development Corporation. He is in charge of the design and building of the world's first submarine used to take tourists to 150 feet.

73

Daniel Gray, BA/73 (SPC), BAHons/75, MA/81, is working in Toronto with Hutchinson-Reid as Senior Research Director. **Eleanore Wellwood**, MA/73, is studying for an MSc in Food Science.

74

Christine Blain, BA/74, LLB (Ottawa), has been appointed Director of the Policy Development Branch within the Policy Development and Analysis Directorate of

Supply and Services Canada.

Timothy P. Burt, MA/74, was appointed to a Lectureship in Physical Geography at the University of Oxford (UK) in 1984 and to a Fellowship of Keble College. In 1985 he was appointed Dean of Keble College. His research interests continue to be in the fields of hydrology and geomorphology.

Gerald Graham, MA/74, PhD/80 (Geneva), heads a group of consultants in Ottawa and abroad specializing in public policy issues and international affairs.

Linda Rider, BA/74, BEd/75 (Queen's), is studying French at the University of British Columbia.

Mick Scromeda, BA/74, spent several years as a management consultant with the Department of National Defence and the United Nations. He has joined Money Concepts, Inc., an international franchiser of financial planning centres, as a Vice-President of the Eastern Ontario Region.

Between You and Me

Nicholas Gammer, MA/74, is with the Adult Education Department, Okanagan College, Kelowna, B.C. During the Iran-Contra Hearings in the second week of July, he caught Lt. Col. Oliver North making "an unforgivable mistake."

Nicholas writes, "Not an error of judgement mind you, but a grammatical error. "...Between General Secord and I," Colonel North stated in one of his sentences, which should have been, of course, "...Between General Secord and me."

The remark prompted Nicholas to prepare a short article on the use and misuse of personal pronouns, which should be an indispensable aid to anyone who's ever puzzled over this seemingly confusing subject. Copies of the article are available, free of charge, from the Alumni Association through the Department of Development and Alumni Services.

75

Brian Fish, BCom/75, was elected to the partnership of Thorne Ernst and Whinney on August 1, 1987.

Timothy R. Gaylard, BA/75, BMus/76, MA/80, MPhil/81 (Columbia), received his PhD in 1987. His thesis title was *Musical Dialogues in 17th Century England*. Timothy and his wife Catharine (Clark) have one daughter Elizabeth, born October 17, 1984.

Duncan Grant, BA/75, married Ginette Vanasse on June 13, 1987. Duncan is Executive Director for the Federation of Canadian Archers.

Brian D. Mann, BCom/75, is a partner with the Winchester office of Ward Mallette, Chartered Accountants. Brian and his wife Ina, have two children: Ben and Alyson.

Daniel O'Gorman, BScHons/75, has transferred to Centre Wellington District High School in Fergus after teaching 10 years at Centennial CVI in Guelph.

76

Kazimiera Adamowski, MSW/76, has been promoted to Assistant Director of the Social Work department of the Ottawa General Hospital.

Timothy Farr, BA/76, has been appointed Director of Operations within the Public Affairs Directorate, Supply and Services Canada.

Karen Kellerman, BA/76, and her husband Ron Jeffrey, have two children: Rachel, born in October 1981 and Anne, born in January 1985.

William A. Macdonald, BA/76, is on leave from the Federal Department of Regional Industrial Expansion during 1987 to complete an MA in public administration at Carleton. He was a policy analyst with DRIE for five years and a costing analyst with the Canadian Transport Commission for five years. His community activities have included the Canadian Ski Marathon and the youth hostels movement. He married Christine Banfill in October of 1983.

77

Kok-Keong Cheang, MSc/77, is Chairman of the Mineral Resource Engineering Program at the Science University of Malaysia. He is working on gold deposits and has discovered a new occurrence for the mineral tetrahedrite. He has a 10-month-old son.

Chris A. Hodgson, BEng/77, has been transferred to Toronto as Chief Construction Engineer for Texaco Canada's Marketing Department.

Lorna Loomis (Huckabone), BA/77, has been appointed Chief Executive Officer of Pems Plus Limited, a federally incorporated firm providing management consulting services to both the public and private sectors.

Robert Livingstone, BA/77, BAHons/79, and his wife Fran, are pleased to announce the birth of Fiona Rose on July 13, 1987, a sister for Joelle Jeanne and Lianne Nicole. Robert is teaching English at Mission Senior Secondary School in British Columbia. They welcome news from alumni friends.

Edward J. Mort, BA/77, is pleased to announce the birth of his daughter, Laura Rose, on September 26, 1986. Edward is in Flight Operations with Bryman Airways in Scotland. He writes to say that "Canada makes the best aircraft in the world - bar - none - and he feels very privileged and proud for all Canadians to be flying the DeHavilland Canada Dash 7".

Renee Robert (Vogel), BAHons/77, MEd/80 (McGill), and her husband, Andy, are pleased to announce the birth of their daughter, Sarah Rose, on April 22, 1987, a sister for two-year-old Joshua. Renee continues to work as a therapist in the Department of Psychology at the Rehabilitation Centre in Ottawa.

Carol Rochefort (Laderoute), BA/77, has purchased a Mr. Mugs Donut franchise which is to begin operating in December 1987.

Janet Steffenhagen, BJ/77, and her husband **Adrian Young**, are pleased to announce the birth of **Dorian** on May 2, 1987. Janet has been working for the Canadian Press in Ottawa since January 1984.

Nelson M. Tsui, BA/77, has completed articling at the law firm of Russell and DuMoulin, and is now an associate with Clark, Wilson, in Vancouver.

Mark S. Young, BSc/77, married **Pat Everest** on May 9, 1987, in Jasper, Alberta.

78

Lorna Bratvold, BJ/78, and **Garry Fairbairn**, BAHons/68, MA/69, have three children: **Jordan** (6), **Jamie** (5) and **Ashley** (1). Lorna is a freelance editor.

Elizabeth Lim (Harris), BA/78 (SPC), and her husband, **Larry**, BCom/79, are pleased to announce the birth of their second child **Diana Heather**, on September 3, 1987, a sister for **Leah** (14 months).

Elaine Mark, BAHons/78, moved back to Toronto last spring after having spent five years working as a software engineer in Princeton, New Jersey.

Lawrence Segal, BScHons/78, MSc/80, PhD/87 (Saskatchewan), has returned to the Northwest Regional Office of Environment

Canada in Edmonton, Alberta, since completing his PhD in toxicology.

Chernoh Sesay, PhD/78, was appointed Dean of the College of Arts and Sciences at Chicago State University on August 1, 1986.

79

John C.J. Butlin, BEng/79, and **Christine Owers** are happy to announce the birth of **James Mitchell** on April 4, 1987. James is a brother for **Andrea**.

Saydah Garrett (Al-Khabyr), BAHons/79, is married to **Kenny Garrett** and lives in East Orange, New Jersey. Saydah is Marketing Assistant in the Financial Institutions Marketing (Europe/Africa) division of American Express Bank.

Linda L'Heureux, BAHons/79, MA/87, is with Labour Canada as an industry relations officer.

Larry Lim, BCom/79, and his wife **Elizabeth (Harris)**, BA/78 (SPC), are pleased to announce the birth of their second child, **Diana Heather** on September 3, 1977, a sister for **Leah** (14 months).

Cheryl MacLean, BA/79, has transferred to the Kitchener Canada Employment Centre where she is a counsellor in the Immigrant Settlement unit, helping new refugees adapt

to our Canadian way of life.

Marc Renaud, BCom/79, his wife **Andree**, and their two children, **Alexandre** (20 months) and **Cathrine** (2 months), are moving to New Zealand where Marc has accepted a two-year posting.

80

Ron Davis, BCom/80, successfully completed an MBA at Concordia University. He began PhD studies at Yale University in September 1987.

Brian Ford, BA/80, has been promoted to senior officer in the field operations branch of the Ottawa Police force.

Mark Goldberg, MSc/80, BScHons/79 (Western), and his wife **Susan Garber** have two children: **Jessica** (2), and **Alex** (9 months). Mark has joined Bell Northern Research in Raleigh, North Carolina.

Ron Jasperse, BA/80, and his wife, **Vicki Cunningham**, BJ/81, are pleased to announce the birth of their son, **Alexander Rhys**, on June 9, 1987.

Leona Pinsky (Christian), BA/80, LLB/85 (Victoria), married **Max Pinsky** on September 6, 1987. Leona is an in-house counsel for West Coast Title Search Ltd. doing solicitor's work and some management.

81

Christopher J. Baker, BA/81, is teaching grades 7 and 8 geography and science in Pickering, Ontario.

Debra Bennett, BA/81, worked in Public Relations for a rapid transit firm for five years. She is now studying for her MBA at York University.

Vicki Cunningham, BJ/81, and her husband **Ron Jasperse**, BA/80, are pleased to announce the birth of their son, **Alexander Rhys**, on June 9, 1987. Vicki is a Communications Officer with the Department of Indian Affairs and Northern Development.

Sue Hender, BScHons/81, is completing her PhD at the University of Waterloo. She is also a faculty member in the School of Urban and Regional Planning at Queen's University.

Lucia Ng, BCom/81, married **Bosco Chiu-Yin Ng**, BEng/83, in January 1987. They are living in Toronto.

Chris T.M. Ryan, BEng/81, is taking an executive MBA course at Simon Fraser University.

82

Janice Armstrong, BJ/82, and her husband, **Dr. Harvey Slick**, are pleased to announce the birth of their daughter **Caitlin Sarah**, in June of 1986. Janice started her own public relations consulting company, **Armstrong Communications**, in June 1987. She was Communications Director of the Manitoba Department of Highways and Transportation for three years.

Rychard Brule, MA/82, is Senior Grants Administrator at the Canadian Institute for International Peace and Security.

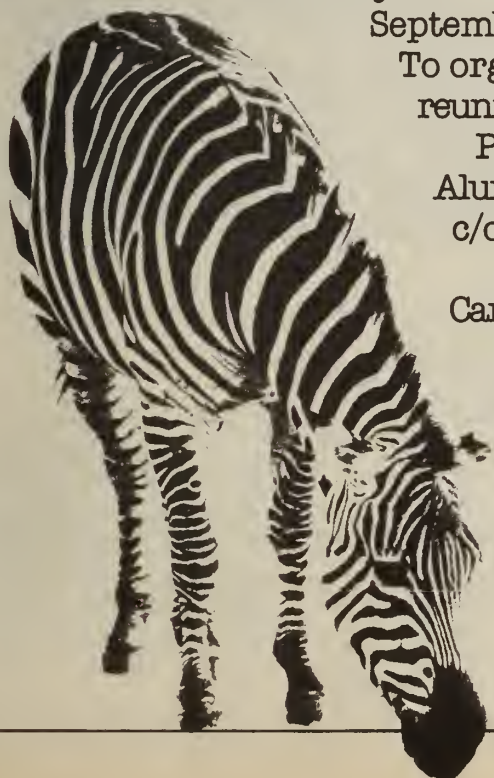
Mayque Delgado, BEng/82, has returned

Graduates of 1978... Have you changed your stripes over the past 10 years?

Times change and so do we. Find out what your classmates are like today at Alumni Weekend, September 23-25, 1988.

To organize a 10-year
reunion, write or call:

Peter Pivko, Chair,
Alumni Weekend '88,
c/o Development &
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Telephone
(613) 564-2800.



to Ottawa from Venezuela with his wife and their three children. He is currently looking for a job in his field.

James J. Stewart, BAHons/82, MA/83 (Glasgow), has left Darlington School and is working in Philadelphia. He writes to say he is "sorry he missed the Res Reunion with all the Third Russell crew".

Thomas E. Ulyett, BAHons/82, is practising law with the Government of Yukon in Whitehorse.

Paul M. Weiss, BScHons/82, received his PhD in Biochemistry in August 1987.

83

Suanne Dorion (Smith), BEng/83, married Glen Dorion on June 13, 1987. Suanne has been working with TES Limited in Ottawa as a project engineer since graduation.

Alan D'Silva, BA/83, LLB/87 (Ottawa), is articling with the law firm of Fasken and

Calvin in Toronto and is writing articles on human rights issues.

Amlan Gupta, BEng/83, retired from the military and started work for Oerlikon Aerospace. He sends his best wishes to all grads from '83 Mechanical Engineering.

Bing Lie, MEng/83, and his wife, Josefina Martinez, are living in Toronto. They would like to know how their friends from 1980-82 are doing and invite them to write.

Darlene MacDonald (Watt), BJ/83, married **Bruce MacDonald**, BID/85, in August 1983. Darlene is working for Global TV in Ottawa.

Bosco Chiu-Yin Ng, BEng/83, married **Lucia Ng**, BCom/81, in January 1987. They are living in Toronto.

84

Geoffrey Brown, BCS/84, and **Amanda Miller**, BCS/84, recently moved into their

new house in Kanata. They are both working at DY-4 Systems Inc.

Mavis Morton, BA/84, BAHons/85, is completing a Master's degree in Sociology at York University in Toronto. She then plans to begin a PhD degree.

Marion Phillips, MA/84, MA/63 (Oxford), has won the Stopford Brooke English Literature Award and is studying at King's College in London, England. She has completed her first year's training towards an Anglican Reader's Licence and expects to receive the licence in November 1988.

David J. Smith, BAHons/84, MBA/86, and his wife Filomena, are pleased to announce the birth of Erica on August 3, 1987. David has transferred to the Montreal office of Touche Ross Management Consultants.

News & Moves

Be sure to let us know whenever you move so you don't miss future issues of *Carleton University Magazine* or other news from the Alumni Association. Simply complete this form and return it to us so that we can update your record and you can let your former classmates know about your moves, career changes, and personal achievements. We're looking forward to hearing from you.

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PERSONAL NEWS

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TEXAS
INSTRUMENTS



**ONCE UPON A TIME THERE
WAS A KNOT NO ONE COULD
UNTIE.**

It was a huge, hopeless tangle of rope and vine that had defied the best efforts of people from all over the world.

Ancient soothsayers claimed the knot was formed by Gordius, legendary King of Gordium.

"Whosoever shall untie the Gordian Knot," said the soothsayers, "shall have all of Asia as their reward."

All of Asia, the fabled land of mystery and magnificence – what a prize!

Yet for centuries, no one had succeeded in unraveling the Gordian knot. Kings and wisemen, warriors and wizards: they all tried, and they all failed.

Then, in the year 333 B.C., a mighty Macedonian King arrived on the scene. Flanked by thousands of

his troops, and armed with one of history's finest and most creative minds, Alexander the Great stood transfixed before the great Gordian Knot.

A hush swept through the ranks as all eyes turned to Alexander. Suddenly a flash of inspiration lit up his face. And with one bold and innovative stroke, Alexander untied the untie-able. Grasping his sword, he slashed through the knot with a swift decisive blow. And went on to rule all of Asia.

Today, the world has changed. Dramatically. But the need for innovative thinking remains the same.

Especially at BNR (Bell Northern Research), where our R&D expertise has enabled our parent company, Northern Telecom, to become the largest supplier of fully digital communications systems in

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So come join the quest. And help us untie the Gordian Knots of today's technology.



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